

**VEHICLE CRASH SIMULATOR
WITH DYNAMIC MOTION SIMULATION**

ABSTRACT OF THE DISCLOSURE

5 A vehicle crash simulator employs a plurality of
actuators to simulate motions or forces of a crash
event. The vehicle crash simulator includes a
simulation platform supporting a test specimen or
vehicle for analysis. The platform is accelerated
10 along a crash acceleration trajectory and forces are
imparted to the platform to simulate a crash pulse or
event. Forces are imparted to the simulation
platform by a plurality of actuators "on-board" or
coupled to the simulation platform for dynamic motion
15 simulation. Multi-axial forces F_x , F_y , F_z are
imparted to simulate complex crash motions or forces
for realistic crash testing.